SHARP

COMPACT DISC STEREO-MUSIK-SYSTEM
SYSTÈME MUSIQUE STÉRÉO AVEC LECTEUR DE DISQUE COMPACT
CADENA ESTÉREO CON COMPACT DISC
COMPACT DISC STEREOMUSIKSYSTEM
SISTEMA MUSICALE STEREO CON LETTORE CD
STEREO-MUZIEKSYSTEEM MET CD-SPELER
COMPACT DISC STEREO MUSIC SYSTEM

MODELL MODELL
MODÈLE MODELLO
MODELO MODEL

CMS-R160CDH
CMS-R160CDG

BEDIENUNGSANLEITUNG
MODE D'EMPLOI
MANUAL DE MANEJO
BRUKSANVISNING
MANUALE DI ISTRUZIONI
GEBRUIKSAANWIJZING
OPERATION MANUAL

DEUTSCH
FRANÇAIS
ESPAÑOL
SVENSKA
ITALIANO
NEDERLANDS
ENGLISH

COMPACT disc DIGITAL AUDIO

BESONDERE ANMERKUNGEN
REMARQUES SPÉCIALES
NOTAS ESPECIALES
SÄRSKILDA ANMÄRKNINGAR
NOTE PARTICOLARI
BIJZONDERE OPMERKINGEN
SPECIAL NOTES

- Die Buchstaben in den in der Modellnummer enthaltenen Klammern zeigen nur die Farbe des Produktes an. Die Bedienungsschritte und die technischen Daten sind unbeeinflußt.

- Les lettres mises en parenthèses du numéro de modèle indiquent la couleur du produit concerné. Le fonctionnement et les caractéristiques ne varient pas selon la couleur du modèle.

- Las letras entre corchetes contenidas en el número del modelo indican el color del producto solamente. El funcionamiento y las especificaciones no quedan afectados.

- Bokstäver inom parantes i modellnummert anger endast produktfärg. Funktioner och tekniska data påverkas inte.

- Le lettere tra parentesi contenute nel numero del modello indicano soltanto il colore del prodotto. Il funzionamento e le caratteristiche non subiscono mutamenti.

- De in het modelnummer opgenomen letters tussen haakjes geven alleen de kleur van het toestel aan, en hebben op geen enkele wijze betrekking op de werking en technische gegevens van het apparaat.

- The letters in brackets contained in the model number indicate the colour of the product only. Operation and specifications are unaffected.

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- Bei Einstellung des POWER-Schalters auf STAND-BY ist die Netzspannung immer noch im Gerät vorhanden.
  Wenn die POWER-Schalter auf STAND-BY eingestellt und die STAND-BY-Anzeige beleuchtet wird, kann das Gerät unter Verwendung der Fernbedienung in Betrieb gesetzt werden.

  Warnung:
  In diesem Gerät sind keine vom Benutzer wartbaren Teile vorhanden. Niemals Abdeckungen entfernen, außer wenn Sie dafür qualifiziert sind. In diesem Gerät sind gefährliche Spannungen vorhanden. Vor Ausführung von irgendwelchen Kundendienstarbeiten oder bei längerer Nichtverwendung des Gerätes stets den Netzstecker aus der Netzsteckdose ziehen.

- Lorsque le commutateur POWER est réglé à la position STAND-BY, l'appareil est toujours sous tension.
  Lorsque le commutateur POWER se trouve sur la position STAND-BY et que le voyant STAND-BY est allumé, l'appareil est prêt à fonctionner par la télécommande.

  Avertissement:
  Cet appareil contient des pièces non réparables par l'utilisateur. Personne non qualifiée n'enlèvera jamais les couvercles.L'appareil contenant des organes portés à haute tension, débrancher l'appareil avant toute réparation ou en période de non-utilisation.

- Cuando el interruptor POWER está puesto en la posición STAND-BY, todavía hay tensión dentro del aparato.
  Cuando el interruptor POWER está puesto en la posición STAND-BY y el indicador STAND-BY se enciende, el aparato puede ponerse en funcionamiento utilizando el controlador remoto.

  Advertencia:
  Tenga en cuenta que dentro de este aparato no hay piezas que pueda reparar. No quite nunca las tapas a menos que se esté cualificado para hacerlo. Este aparato tiene en su interior tensiones peligrosas. Desenchufe siempre la clavija de la red del tomacorriente antes de realizar cualquier servicio de mantenimiento y cuando no se use el aparato durante un largo período de tiempo.

- När POWER-omkopplaren är i läge STAND-BY, finns nätspänning i apparaten.
  Med POWER i läge STAND-BY och när STAND-BY lyser,,kan apparaten slås på med fjärrkontrollen.

  Varning:
  Apparaten innehåller inga delar som kan åtgärdas av kunden. Höljet får endast öppnas av kvalificerad personal. Apparaten innehåller farliga spänningar. Stickkontakten ska därför dras ut från nätuttaget före reparationsarbeten och bör dras ut om apparaten inte ska användas på mycket länge.

- Når POWER-kontakten er sat på STAND-BY positionen, er der stadig netspænding tilstede i apparatet.
  Når POWER-kontakten er sat i STAND-BY-position, og STAND-BY indikatoren er tændt, kan apparatet startes v.hj.a. fjernbetjeningen.

  Advarsel:
  Apparatet indeholder ingen dele, der kan repareres af brugeren selv. Fjern aldrig kabinettet med mindre De er kvalificeret hertil. Apparatet indeholder farlig strømspænding. Træk altid stikket ud af stikkontakten før der foretages reparationer, eller hvis apparatet ikke er i brug i længere tid.

- Quando l'interruttore POWER si trova in posizione STAND-BY, all'interno dell'apparecchio c'è ancora la corrente.
  Se l'interruttore POWER si trova nella posizione STAND-BY e l'indicatore STAND-BY è acceso, l'unità può venire accesa con il telecomando.

  Avvertenza:
  L'apparecchio non contiene parti riparabili dall'utente. Non togliere mai i coperchi, a meno di non essere qualificati per farlo. All'interno dell'apparecchio ci sono tensioni pericolose, per cui si deve sempre staccare la spina del cavo d'alimentazione dalla presa di corrente prima di qualsiasi intervento di manutenzione e quando non si usa l'apparecchio per un lungo periodo di tempo.

- Wanneer de POWER schakelaar in de STAND-BY stand staat, loopt er nog steeds stroom (netspanning) rond in het toestel. Wanneer de POWER schakelaar in de STAND-BY staat en de STAND-BY indikator brandt, kan het toestel ingeschakeld worden via de afstandsbedieningseenheid.

  Waarschuwing:
  Dit toestel bevat geen door de gebruiker te repareren onderdelen. Verwijder de behuizing nooit tenzij u deskundig bent op dit gebied. In het toestel loopt een gevaarlijke spanning rond; haal de stekker altijd uit het stopkontakt alvorens onderhoud uit te voeren of wanneer het toestel voor langere tijd niet gebruikt wordt.

- When the POWER switch is set at STAND-BY position, mains voltage is still present inside the unit. When the POWER switch is set at STAND-BY position and the STAND-BY indicator is illuminated, the unit may be brought into operation by use of remote control.

  Warning:
  This unit contains no user serviceable parts. Never remove covers unless qualified to do so. This unit contains dangerous voltages, always remove mains plug from the socket before any service operation and when not in use for a long period.

DENNA APPARAT ÄR ANSLUTEN TILL 230 V VÄXELSTRÖM NÄR STICKPROPPEN ÄR INSKJUTEN I VÄGGUTTAGET. FÖR ATT FULLSTÄNDIGT KOPPLA IFRÅN APPARATEN, V.G. DRAG UT STICKPROPPEN.

- This apparatus complies with the requirements of EN 55014, 02.1987.

- Dieses Gerät stimmt mit den Bedingungen der EN 55014, 02.1987.

- Cet appareil répond aux spécifications de la EN 55014, 02.1987.

- Dit apparaat voldoet aan de vereiste EN 55014, 02.1987.

- Apparatet opfylder kravene i EN 55014, 02.1987.

- Questo apparecchio é stato prodotto in conformità alle EN 55014, 02.1987.

- Este aparelho responde às especificações da EN 55014, 02.1987.

- Este aparato cumple las especificaciones de la EN 55014, 02.1987.

- Αὐτή ἡ συσκευή τηρεῖ τίς προδιαγραρές τῆς EN 55014, 02.1987.

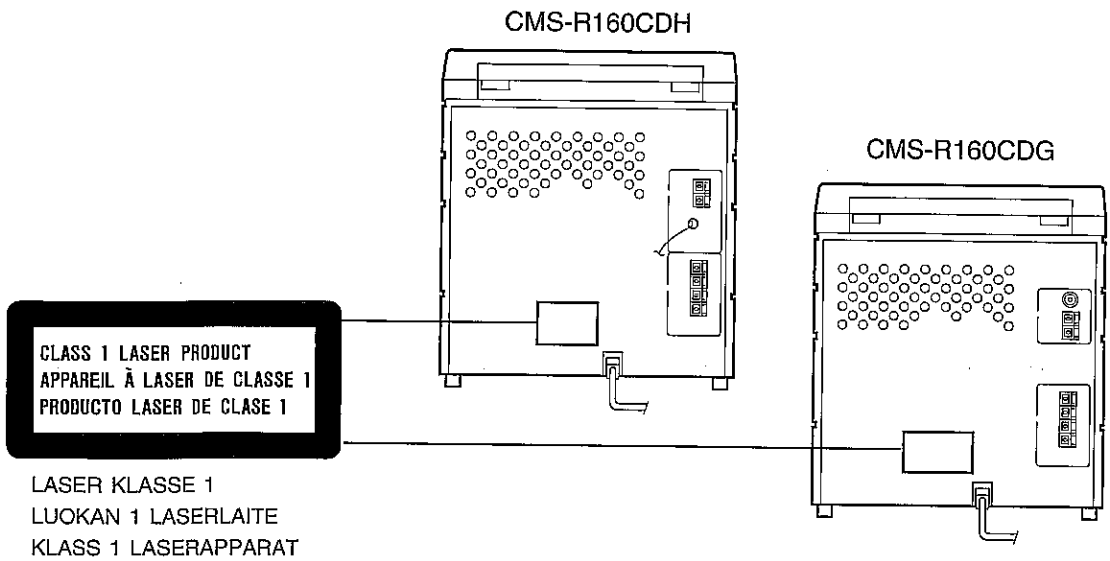
- **Vorsicht:**
  Dieses Produkt enthält ein Niederleistungslaserapparat. Um andauernde Sicherheit zu sichern, niemals die Abdeckung entfernen oder versuchen, die Innenseite des Produktes zu berühren.
  Wenden Sie sich für alle Wartungsarbeiten an berechtigten Fachhändler.

- **Attention:**
  Ce produit contient un dispositif émettant un laser à faible puissance. Pour assurer la sécurité, ne pas enlever le couvercle ni accéder à l'intérieur du produit. Pour toute réparation, s'adresser à une personne qualifiée.

- **Atención:**
  Este producto contiene un dispositivo láser de baja potencia. Para asegurar la seguridad continua, no extraiga la cubierta ni acceda al interior del producto. Para todas las operaciones de reparación, consulte a una persona cualificada.

- **Let op:**
  Dit toestel bevat een zwakke lasereenheid. Uit veiligheidsoverwegingen mag de gebruiker zelf daarom nooit afdekkingen of een gedeelte van de behuizing verwijderen.
  Laat alle onderhouds- en reparatiewerkzaamheden over aan een bevoegde vakman.

- **Caution:**
  This product contains a low power laser device. To ensure continued safety do not remove any cover or attempt to gain access to the inside of the product. Refer all servicing to qualified personnel.



ENGLISH

INTRODUCTION

Thank you for purchasing this SHARP product.
For the best performance, read this manual carefully. It will guide you in operating your SHARP product.

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PRECAUTIONS

- Do not use oil, solvents, petrol, paint thinners or insecticides on the unit.
- Do not expose the unit to moisture, to temperatures higher than 60°C (140°F) or to extreme low temperatures.
- Keep the unit away from direct sunlight, strong magnetic fields, excessive dust, humidity and electronic/electrical equipment (home computers, facsimiles, etc.) which generates electrical noise.
- Hold the AC power plug by the head when removing it from the AC socket, since pulling the lead can damage internal wires.
- Remove the AC power plug from the wall socket before cleaning the heads, pinch rollers, etc.
  This unit contains dangerous voltages.
  Do not remove the outer cover, as this may result in electric shock. Refer internal service to your local SHARP service facility.
- Use the unit on a firm level surface free from vibration, and do not put anything on the unit.
- If the unit does not work properly whilst in use, set the POWER switch to STAND-BY and then to ON again.

Warning:
The voltage used must be the same as that specified on this unit. Using this product with a higher voltage than that which is specified is dangerous and may result in a fire or other type of accident causing damage. SHARP will not be held responsible for any damage resulting from use of this unit with a voltage other than that which is specified.

■ Volume control

The sound level at a given volume setting depends on a combination of speaker efficiency, location and various other factors.
It is advisable to avoid exposure to high levels of sound, which occur when turning on the unit with the volume control setting at high, or when continually listening at high levels.

■ Condensation

Sudden temperature changes and storage or operation in an extremely humid environment may cause condensation inside the cabinet.
Condensation can cause the unit to malfunction.
Follow the procedure below to eliminate condensation.

● CD pickup

Leave the power on with no disc in the unit until normal playback is possible (about 1 hour).

● Tape head

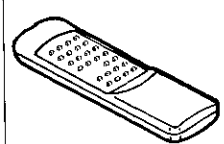
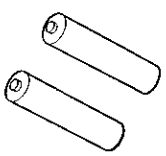
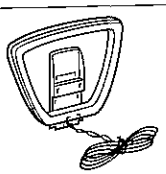
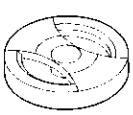
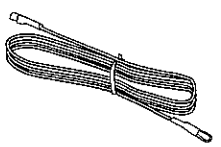
Leave the power on with no cassette in the unit until normal playback is possible (about 1 hour).

Note:
If condensation forms on the tape head, foreign matter may accumulate on it during use.

● Remote control

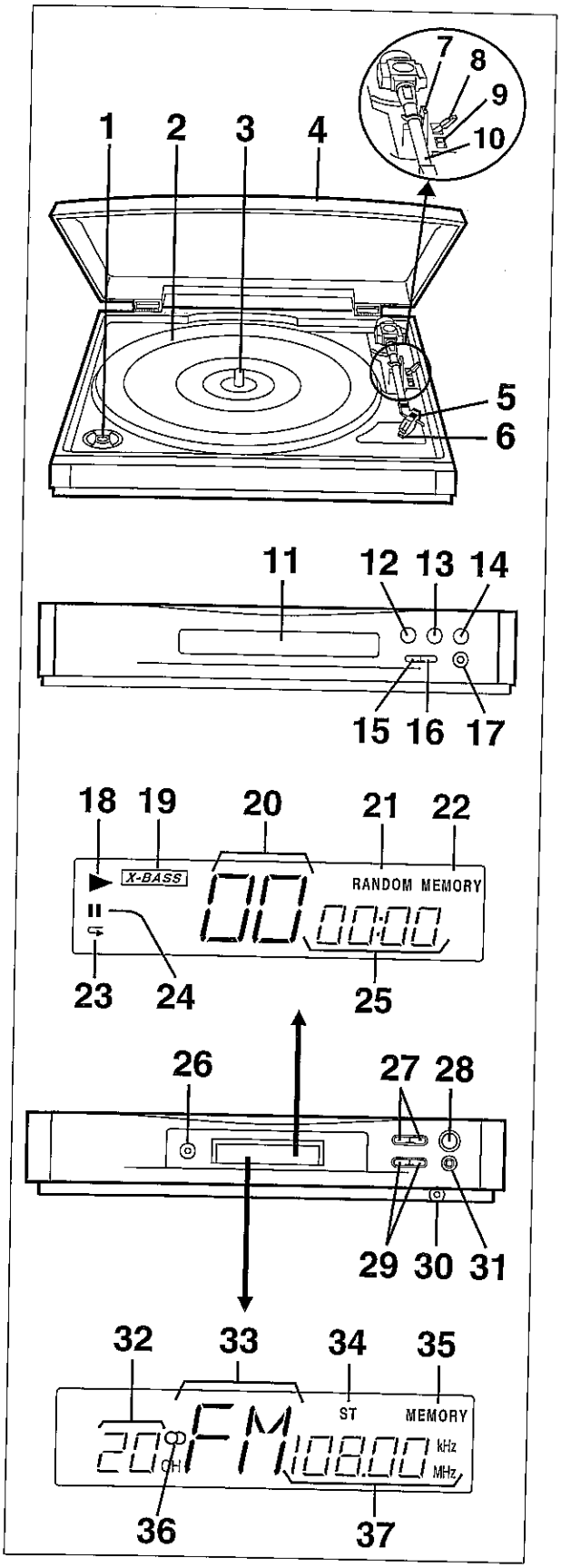
Wipe off any condensation on the transmitter window with a soft cloth before operating the unit.

ACCESSORIES

 Remote control × 1	 "AA" size batteries (UM/SUM-3, R6, HP-7 or similar) × 2	 MW/LW loop aerial × 1	 EP record adaptor × 1	 FM aerial × 1 (CMS-R160CDG only)

Note:
Parts and equipment mentioned in this operation manual other than those shown above are not included.

NAMES OF CONTROLS AND INDICATORS



■ Stereo Turntable section

1. 17 cm (7") EP Record Adaptor
2. Turntable Platter
3. Centre Spindle
4. Dust Cover
5. Headshell
6. Cartridge

7. Tonearm Rest
8. Cue Lever
9. Speed Selector Switch
10. Tonearm

■ Compact disc player section

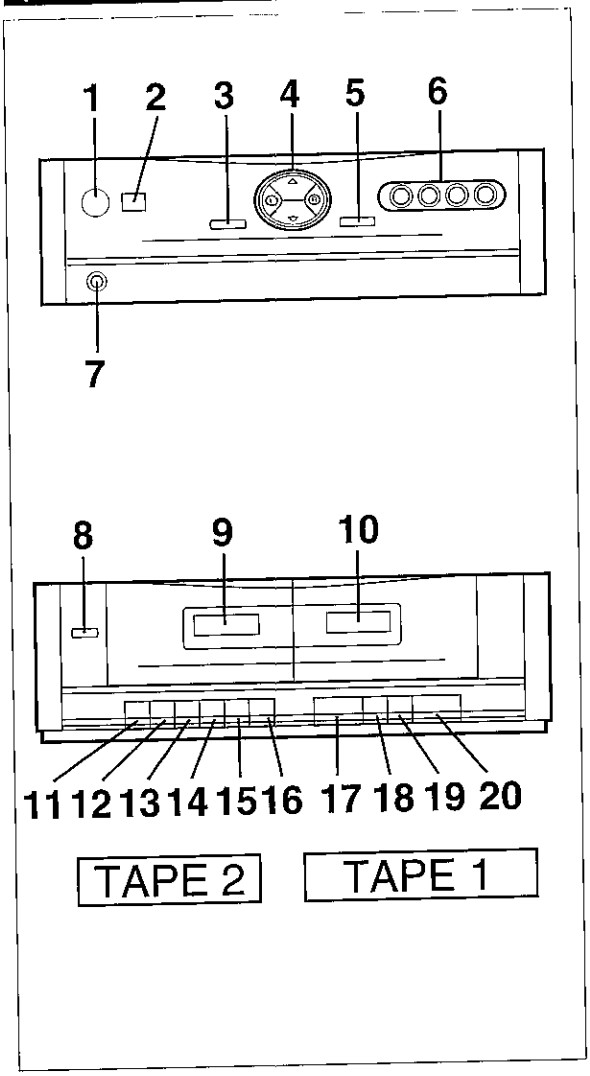
11. Disc Tray
12. Open/Close Button: ⏏
13. Stop Button: ■
14. Play Button: ▶
15. Track Down/Review Button: |◀◀ / ◀◀
16. Track Up/Cue Button: ▶▶| / ▶▶
17. Pause Button: ❚❚

18. Play Indicator: ▶
19. Extra Bass Indicator: X-BASS
20. Track Number Indicator
21. Random Indicator
22. Memory Indicator
23. Repeat Indicator: ⊂
24. Pause Indicator: ❚❚
25. Minutes and Seconds Indicator

■ Stereo synthesizer tuner section

26. Stand-By Indicator
27. Preset Up/Down Buttons: ∨/∧
28. Band Selector Button
29. Tuning Up/Down Buttons: ∨/∧
30. Reset Button
31. Memory Button

32. Preset Channel Indicator
33. Band Indicator
34. FM Stereo Mode Indicator
35. Memory Indicator
36. FM Stereo Indicator: ∞
37. Station Frequency



1. Power Switch
2. Remote Control Sensor
3. Extra Bass Button : X-BASS
4. Volume/Balance Control Buttons
5. Equalizer Mode Button
6. Function Selector Buttons
7. Headphones Socket

■ Stereo double cassette deck section

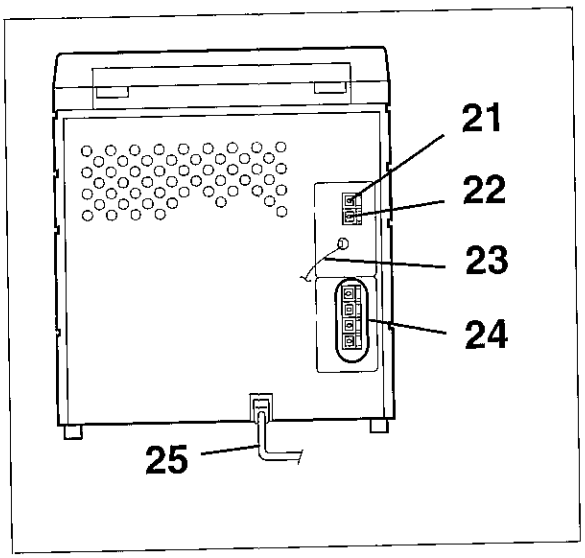
8. Dubbing Speed/Beat Cancel Switch
9. TAPE 2) Cassette Compartment
10. TAPE 1) Cassette Compartment

TAPE 2

11. Record Button: ●
12. Play Button: ▶
13. Rewind Button: ◀◀
14. Fast Forward Button: ▶▶
15. Stop/Eject Button: ■/⏏
16. Pause Button: ❚❚

TAPE 1

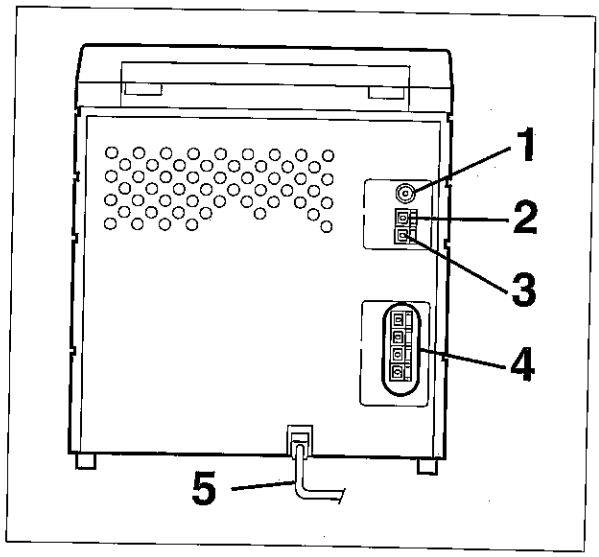
17. Play Button: ▶
18. Rewind Button: ◀◀
19. Fast Forward Button: ▶▶
20. Stop/Eject Button: ■/⏏



■ Rear panel (CMS-R160CDH)

21. MW/LW Aerial Earth Terminal
22. MW/LW Aerial Terminal
23. FM Aerial Wire
24. Speaker Terminals
25. AC Power Lead

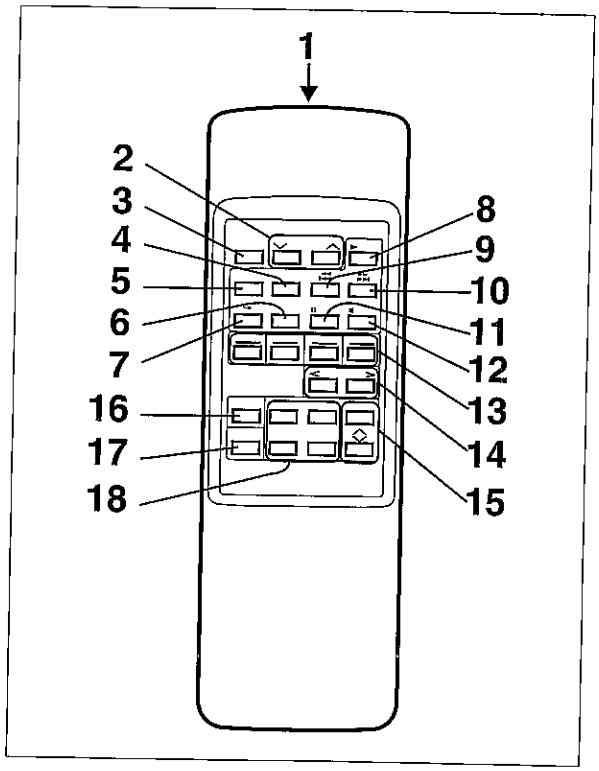
(Continued)



■ Rear panel (CMS-R160CDG)

1. FM 75 ohms Aerial Socket
2. MW/LW Aerial Earth Terminal
3. MW/LW Aerial Terminal
4. Speaker Terminals
5. AC Power Lead

REMOTE CONTROL



■ Names of controls

1. Remote Control Transmitter Window

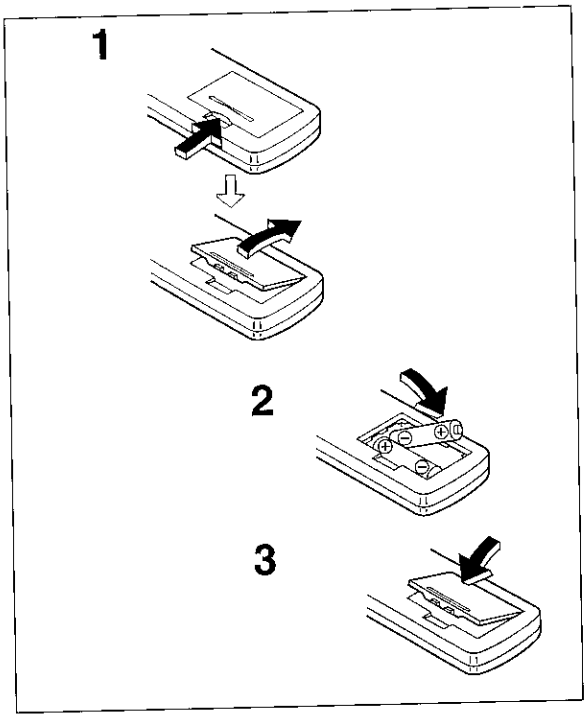
● Tuner control buttons

2. Preset Up/Down Buttons: ∨/∧
3. Band Selector Button

● CD control buttons

4. Memory Button
5. Clear Button
6. Random Button
7. Repeat Button: ⊂
8. Play Button: ▶
9. Track Down/Review Button: ◀◀ / |◀◀
10. Track Up/Cue Button: ▶▶ / ▶▶|
11. Pause Button: ❚❚
12. Stop Button: ■

13. Function Selector Buttons
14. Balance Control Buttons: L/R
15. Volume Up/Down Buttons: ∧/∨
16. Extra Bass Button : X-BASS
17. Power Button
18. Equalizer Mode Buttons



■ Loading the batteries for the remote control

1 Remove the battery compartment cover.

2 Insert 2 "AA" size batteries (UM/SUM-3, R6, HP-7 or similar) into the battery compartment.

- When inserting the batteries, push them towards the ⊖ battery terminals.
- Placing the batteries the wrong way round can cause the unit to malfunction.

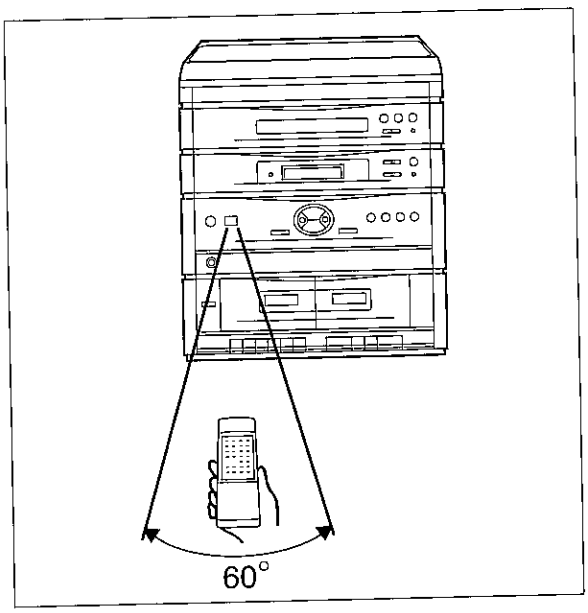
3 Replace the battery compartment cover.

Battery removal:

- Push the batteries towards the ⊖ battery terminals and remove them.

Precautions for battery use:

- Insert the batteries according to the direction indicated in the battery compartment.
- Replace all batteries with new ones at the same time.
- Remove the batteries if weak or if the unit is not in use for long periods to prevent potential damage due to battery leakage.
- Don't mix normal batteries with rechargeable batteries.
- Don't mix old and new batteries.

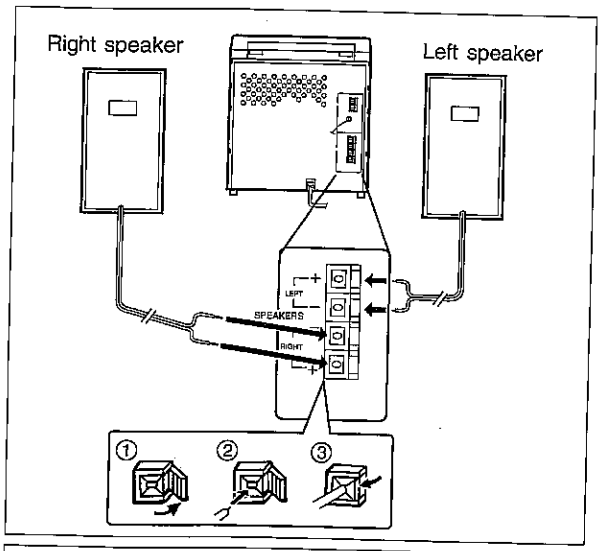


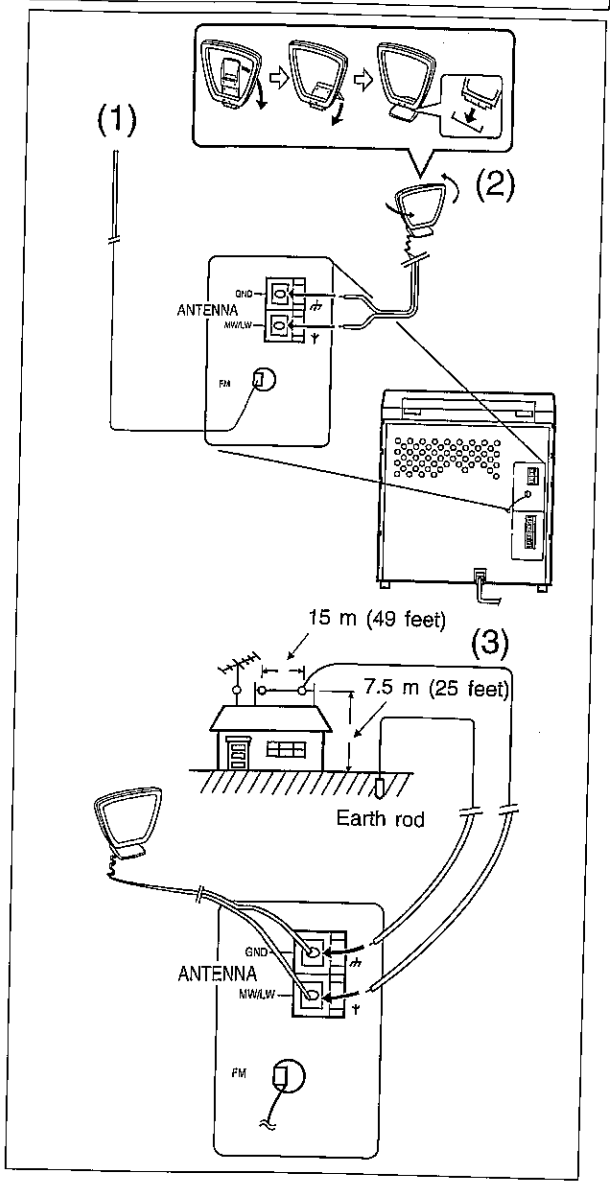
■ Proper use of the remote control

Aim the remote control at the remote control sensor within 60°, with no obstacles, and operate as shown.

Notes concerning use:

- Replace the batteries if control distance decreases or operation becomes erratic.
- Periodically clean the transmitter window on the remote control and the sensor on the main unit with a soft cloth.
- Exposing the sensor on the main unit to strong light can interfere with operation. Change the lighting or the direction of the unit.
- Keep the remote control away from moisture, excessive heat, shock, and vibrations.
- The remote control's usable range is between 0.2 m (8") and 6 m (20') away from the sensor.





- Unplug the AC power lead from the AC socket before connecting or disconnecting any component.

■ Speaker connection

Connect each speaker wire to the SPEAKER terminals as shown.
Use speakers with an impedance of 8 ohms or more, since lower impedance speakers can damage the unit.

Cautions:

- Connect the wire with the line to the minus (–) and the plain wire to the plus (+) terminal.
- Do not mistake the right channel for the left channel when connecting the speakers to the unit.
- Do not let the bare speaker wires touch each other as this could damage the amplifier and/or speakers.

■ Aerial connection (CMS-R160CDH)

(1) Supplied FM aerial

Position the FM aerial wire in the direction where the strongest signal can be received.

(2) Supplied MW/LW loop aerial

Connect the MW/LW loop aerial wire to the MW/LW and GND terminals. Position the MW/LW loop aerial for optimum reception.
Place the MW/LW loop aerial on a shelf etc., or attach it to a stand or wall with screws (not supplied).

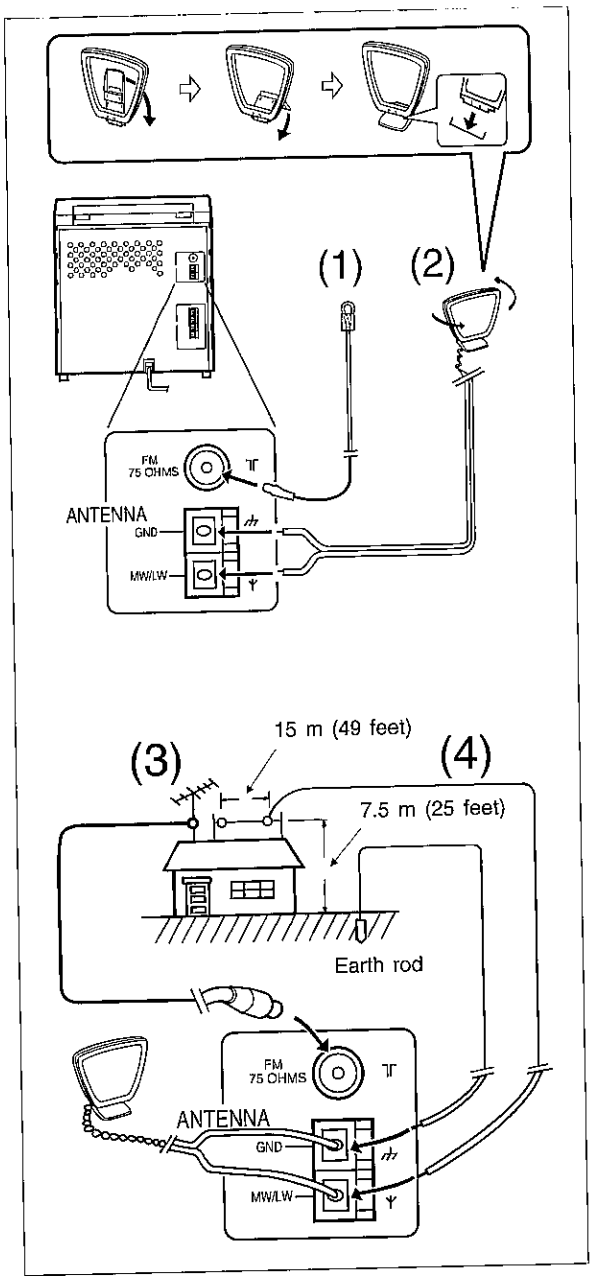
Notes:

- When static is still heard even after adjusting the position of the MW/LW loop aerial, try reversing the wire connections.
- Do not place the MW/LW loop aerial and the FM aerial wire on the unit. It may result in noise generation, since the unit is equipped with digital electronics.
  Place the MW/LW loop aerial and the FM aerial wire away from the unit for better reception.
- If the MW/LW loop aerial and the FM aerial wire are placed near the AC power lead, it may cause interference in radio reception.

(3) External MW/LW aerial

Use an external MW/LW aerial if you need better reception. Consult your dealer.

Note:
When using an external MW/LW aerial, be sure to keep the wire of the MW/LW loop aerial connected.



■ Aerial connection (CMS-R160CDG)

(1) Supplied FM aerial

Connect the FM aerial wire to the FM 75 OHMS socket and position it in the direction where the strongest signal can be received.

(2) Supplied MW/LW loop aerial

Connect the MW/LW loop aerial wire to the MW/LW and GND terminals. Position the MW/LW loop aerial for optimum reception.
Place the MW/LW loop aerial on a shelf etc., or attach it to a stand or wall with screws (not supplied).

Notes:

- When static is still heard even after adjusting the position of the MW/LW loop aerial, try reversing the wire connections.
- Do not place the MW/LW loop aerial and the FM aerial wire on the unit. It may result in noise generation, since the unit is equipped with digital electronics.
  Place the MW/LW loop aerial and the FM aerial wire away from the unit for better reception.
- If the MW/LW loop aerial and the FM aerial wire are placed near the AC power lead, it may cause interference in radio reception.

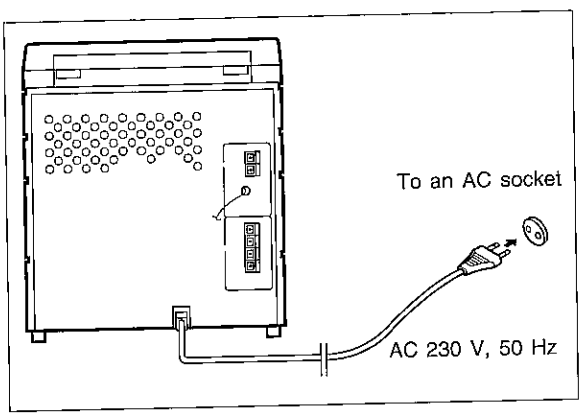
(3) External FM aerial

Use an external FM aerial if you need better reception. Consult your dealer.

(4) External MW/LW aerial

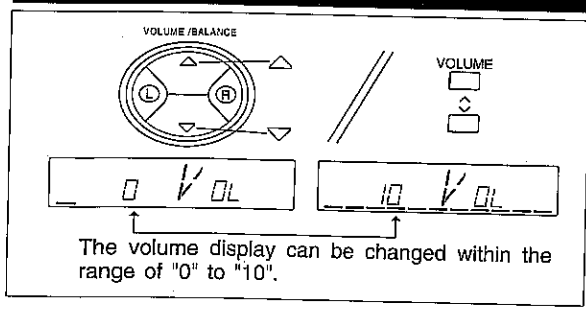
Use an external MW/LW aerial if you need better reception. Consult your dealer.

Note:
When using an external MW/LW aerial, be sure to keep the wire of the MW/LW loop aerial connected.



■ Connecting the AC power lead

- After connecting the speakers, plug the AC power lead into a convenient AC socket.
- Unplug the AC power lead from the AC socket if the unit is not to be used for a prolonged period of time.

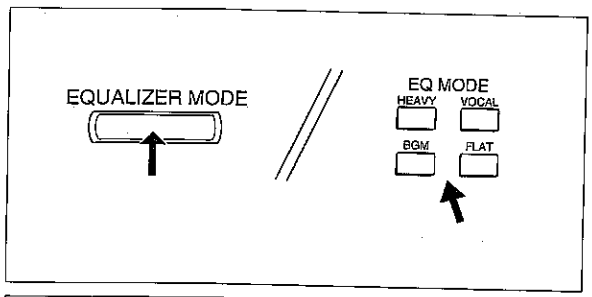


The volume display can be changed within the range of "0" to "10".

■ Volume

Main unit/remote control operation

Press the VOILUME △ (∧) button to increase the volume and the VOLUME ▽ (∨) button to decrease the volume.



■ Pre-programmed equalizer

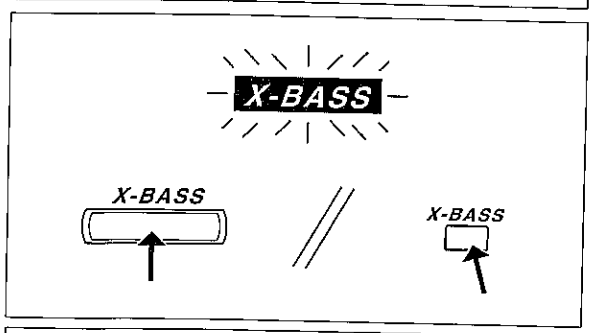
Main unit operation

Each time the EQUALIZER MODE button is pressed, the different mode setting will switch as follows:

FLAT→HEAVY→VOCAL→BGM

Remote control operation

Select the mode you want using the EQ MODE button.

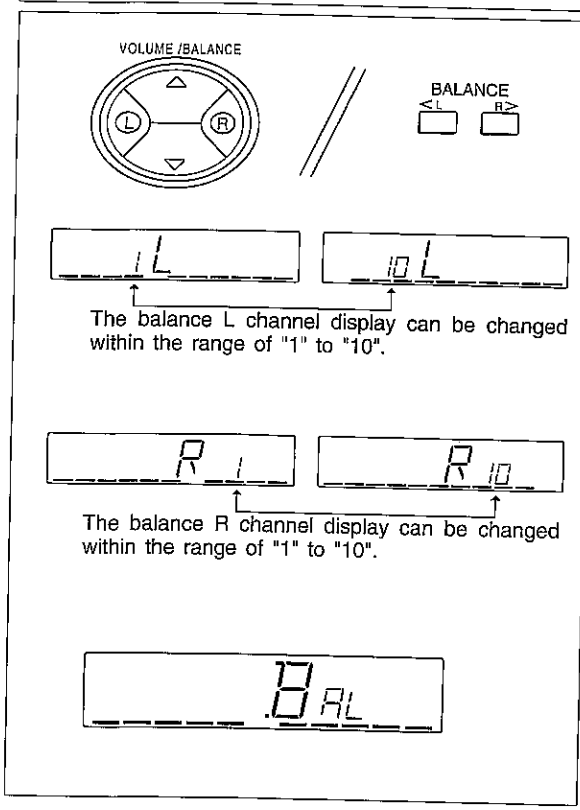


■ Extra bass (X-BASS)

Main unit/remote control operation

Press the X-BASS button to emphasise the bass region of the frequency spectrum.

The "X-BASS" indicator will light up.
Press the X-BASS button again to cancel the extra bass mode.
The "X-BASS" indicator will go out.



The balance L channel display can be changed within the range of "1" to "10".

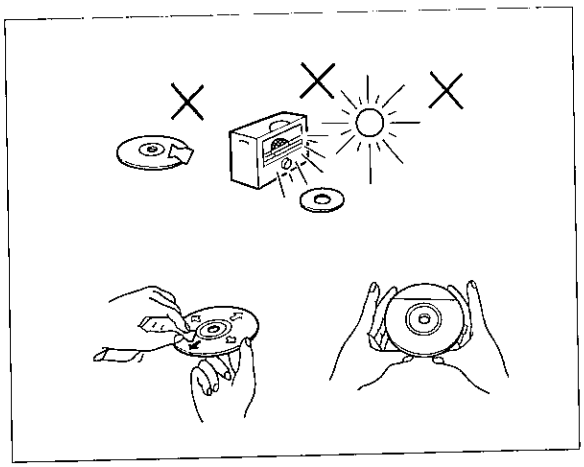
The balance R channel display can be changed within the range of "1" to "10".

■ Balance

Main unit/remote control operation

Press the BALANCE L button to decrease the level of the right speaker, and press the BALANCE R button to decrease the level of the left speaker.

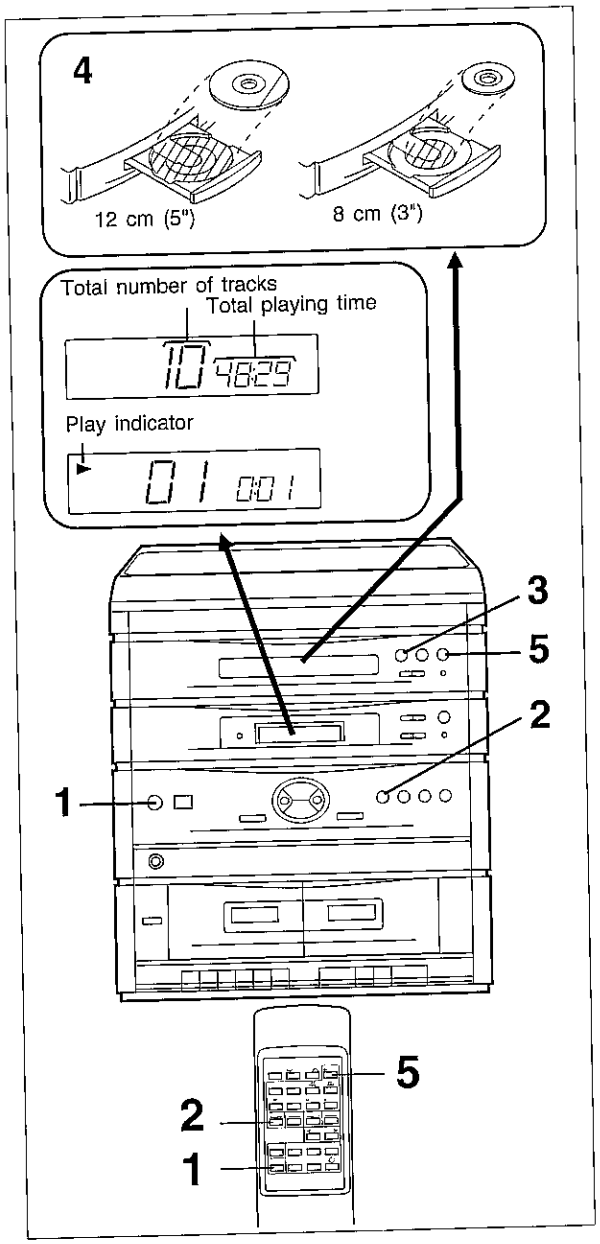
When the BALANCE L and BALANCE R buttons are pressed simultaneously, the balance will move to the centre position automatically.



■ Care of compact discs

Compact discs are fairly resistant to damage, however mistracking can occur due to an accumulation of dirt on the disc surface.
Follow the guidelines below for maximum enjoyment from your CD collection and player.

- Do not write on either side of the disc, particularly the non-label side. Signals are read from the non-label side. Do not mark this surface.
- Keep your discs away from direct sunlight, heat, and excessive moisture.
- Always hold the CDs by the edges. Fingerprints, dirt, or water on the CDs can cause noise or mistracking. If a CD is dirty or does not play properly, clean it with a soft, dry cloth, wiping straight out from the centre, along the radius.



■ CD playback

1 Set the POWER switch to ON.

2 Press the CD button.

3 Press the OPEN/CLOSE button to open the disc tray.

4 Place a disc on the tray, label side up.

- Be sure to place the 8 cm (3") disc in the middle of the table.

5 Press the PLAY button to close the disc tray and begin playback from track 1.

- The "►" indicator will appear and playback will begin.
- When a disc is placed on the disc tray and the disc tray is closed by either pressing the OPEN/CLOSE button or lightly pushing on the front of the disc tray, the total number of tracks and the total playing time will be displayed for several seconds.

To interrupt playback:

Press the PAUSE button.

- The "❚❚" indicator will light up.

Press the PLAY button to resume playback from the same point.

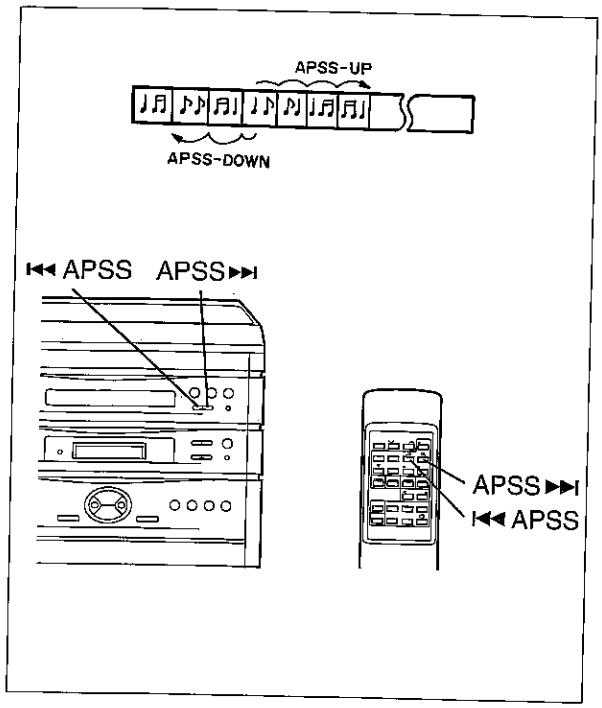
To stop playback:

Press the STOP button.

To switch the unit off after use:

Set the POWER switch to STAND-BY.

Note:
If the function selector button is set to TUNER, the CD player will not function.



■ APSS (Auto Program Search System)

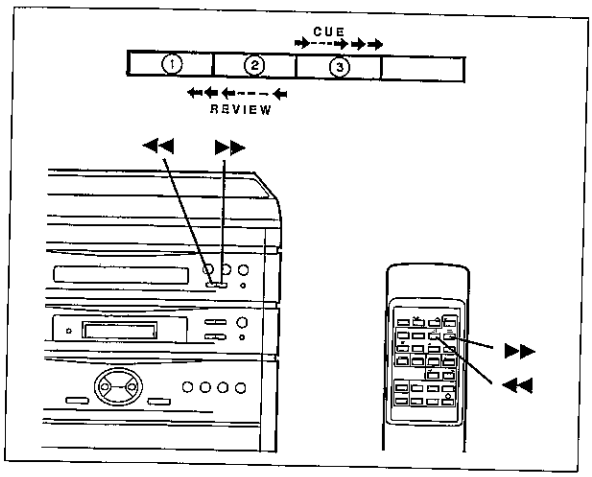
APSS automatically locates the beginning of any track.

1 Load a disc and begin playback.

2 Press the APSS ⏭ button for less than 0.5 seconds to move forward or the ⏮ APSS button for less than 0.5 seconds to reverse through the CD.

- The "▶" indicator flashes whilst searching for the track's beginning.
- If the ⏮ APSS button or APSS ⏭ button is pressed repeatedly during playback, playback will begin from the beginning of the track shown in the track number indicator.
- If the ⏮ APSS button or APSS ⏭ button is pressed whilst in the stop mode, the CD player will stop at the beginning of the track shown in the track number indicator. Press the PLAY button to begin playback.

Note:
APSS will move forward or backward from any point on the disc before playback begins. It will not move forward during playback of the final track.



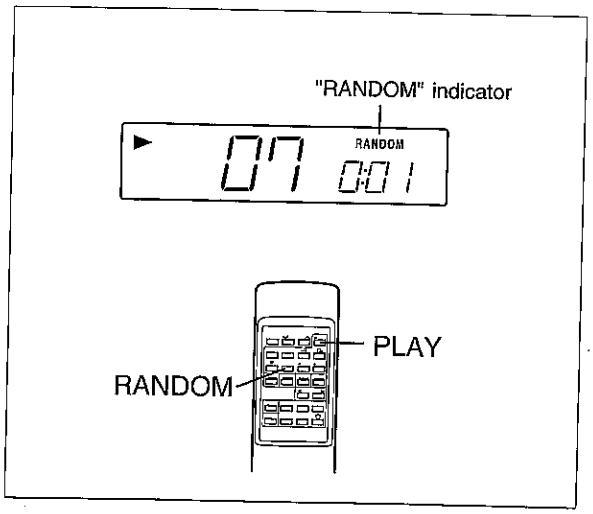
■ Cue and review

1 Load a disc and begin playback.

2 To fast forward audibly, hold down the ▶▶ button for at least 0.5 seconds.
To fast reverse audibly, hold down the ◀◀ button for at least 0.5 seconds.

3 Normal playback will resume when the ◀◀ or ▶▶ button is released.

Note:
- If the end of the disc is reached whilst cueing, "End" lights up and CD operation is paused. Press the ◀◀ button for fast reverse or press the STOP button to stop CD operation.



■ Random play

Remote control operation

The tracks on the disc can be played in random order.

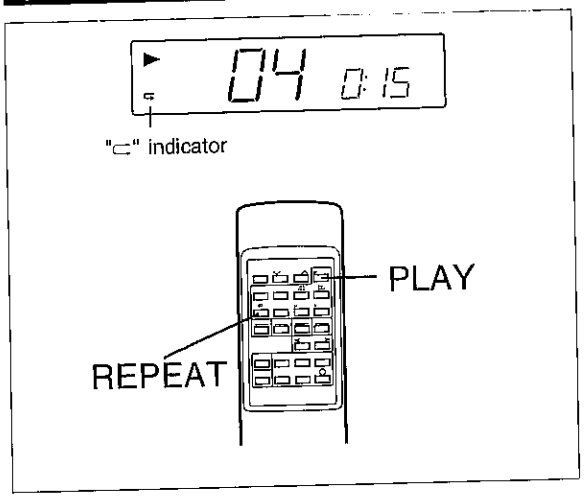
1 Press the RANDOM button.
The "RANDOM" indicator will light up.

2 Press the PLAY button to begin random play.

To cancel random play:

Press the RANDOM button again.
- The "RANDOM" indicator goes out.

Note:
- When in the random play mode, the CD will continue to play until the STOP button is pressed.



■ Repeat play

Remote control operation

An entire disc, a single track, or a programmed sequence can be continuously repeated.

1 Press the REPEAT button.

- The "⊂" indicator will light up.

2 Press the PLAY button.

To cancel repeat play:

Press the REPEAT button again.

- The "⊂" indicator will go out.

Note:

- When in the repeat play mode, the CD will continue to play until the STOP button is pressed.

■ APMS (Automatic Programmable Music Selector)

Remote control operation

1 Load a disc and close the disc tray.

2 Press the ⏮ APSS or APSS ⏭ button to select the desired track.

- The selected track number will be displayed.

3 Press the MEMORY button.

- The "MEMORY" indicator will light to show that the programmed sequence is being entered into memory. The TRACK indicator will show the selected track number, and the SEC indicator will show the playback order.

4 Repeat steps 2 - 3 for any other track. Up to 32 tracks can be programmed.

5 Press the PLAY button to start playback of the programmed selections.

To clear the programmed selections:

1 Press the STOP button to enter the stop mode.

2 Press the CLEAR button.

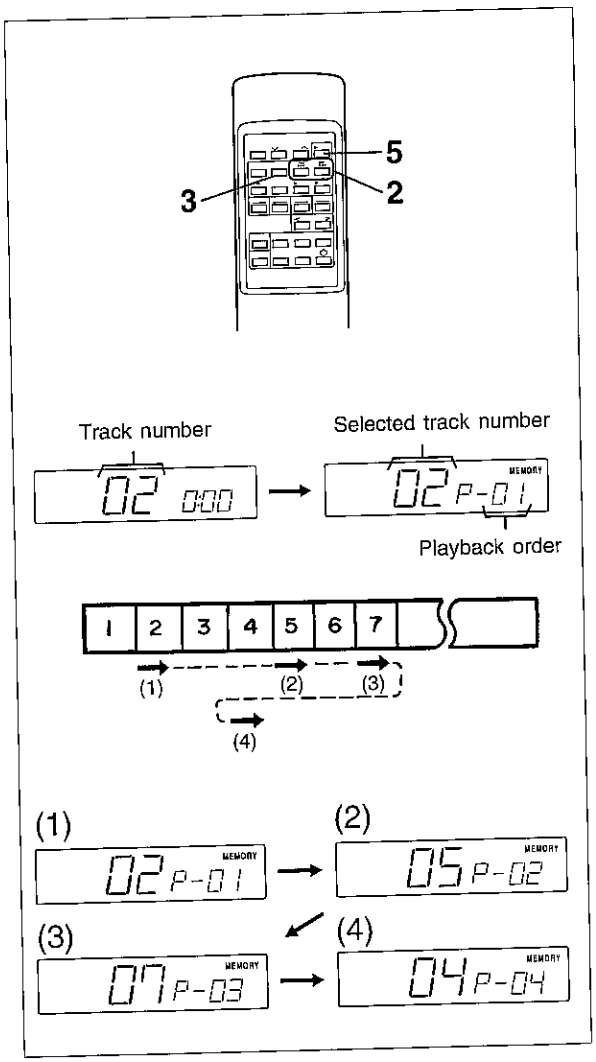
- Each time the button is pressed, one track will be cleared, beginning with the last track programmed.

To clear all the programmed selections:

Set the POWER switch to STAND-BY.

Notes:

- It is possible to programme a sequence of tracks before loading the disc.
- Programming and cancelling are not possible during playback or pause.



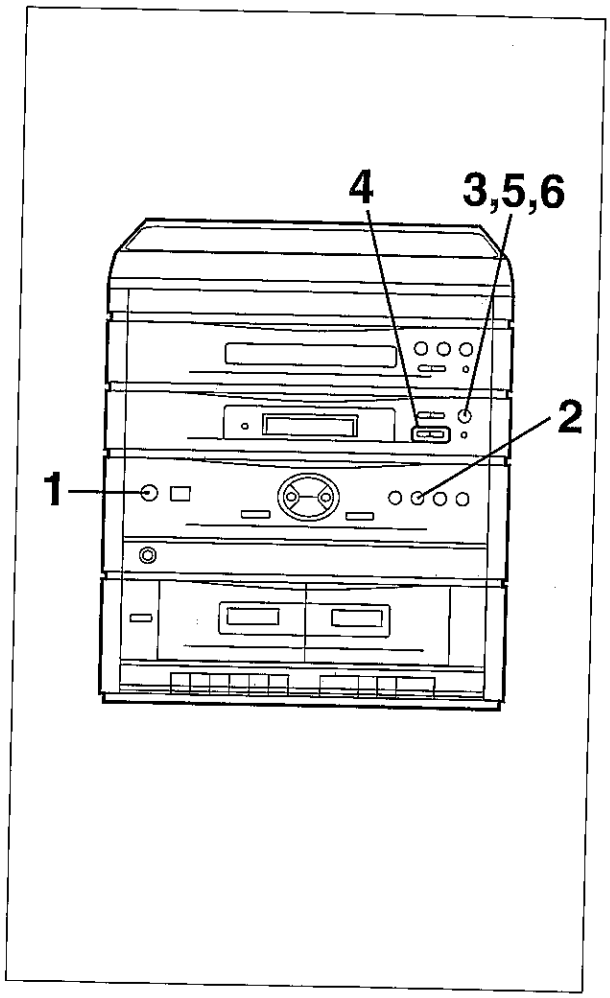
(Continued)

Precautions:

- If TV or radio interference occurs during CD operation, move the unit away from the TV or radio.
- Subjecting the unit to shock or vibration can cause mis-tracking.
- Do not push the disc tray whilst it is moving.
- Press the OPEN/CLOSE button if a disc or other object is caught by the tray. (The tray motor will stop after 4 seconds even if the OPEN/CLOSE button is not pressed.)
- If power fails whilst the tray is open, wait until the power supply returns or gently push the tray manually to close it.
- If the disc is damaged, dirty, or loaded upside down, the display will show the following indication:
  - "Cd" does not stop flashing, or
  - "Cd" is displayed.
  - "Er" is displayed.

  Clean, replace, or load the disc properly.

RADIO OPERATION



■ Tuning

1 Set the POWER switch to ON.

2 Press the TUNER button.

3 Select the desired frequency band. (FM ST, FM, MW or LW)

4 Use the TUNING (∨ or ∧) button to tune in to the desired station.

Manual tuning:

Press the TUNING (∨ or ∧) buttons as many times as required to adjust the frequency shown on the display to the frequency of the desired station.

Auto scan tuning:

When the TUNING (∨ or ∧) button is pressed for more than 0.5 seconds, the tuning stops at the first receivable broadcast station.

Notes:

- When radio interference occurs during auto scan tuning, auto scan tuning may stop automatically at that point.
- If a weak station signal is found during auto scan tuning, the station will be skipped.

5 To receive an FM stereo transmission, press the BAND button so that the "ST" indicator on the display lights up.

- The "ꝏ" indicator lights up when an FM broadcast is in stereo.

6 If the FM reception is weak, press the BAND button so that the "ST" indicator goes out.

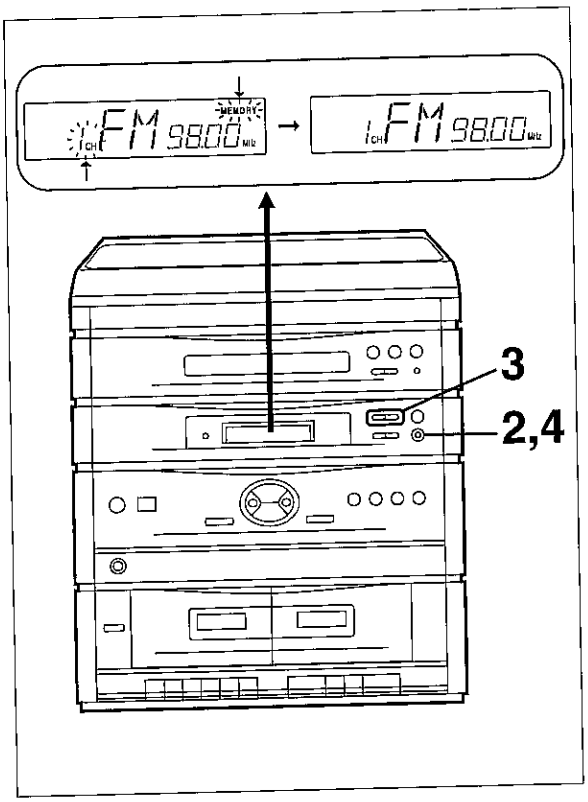
- Although the reception changes to monaural, the sound becomes clearer.

To switch the unit off after use:

Set the POWER switch to STAND-BY.

Note:

The memory recalls the last station received even after changing the BAND selector button or setting the POWER switch to STAND-BY.



■ Preset tuning

You can store up to 40 stations (20 FM stations, 10 MW stations and 10 LW stations) and recall them at the push of a button.

1 Perform steps 1 - 6 in the "Tuning" section.

2 Press the MEMORY button.

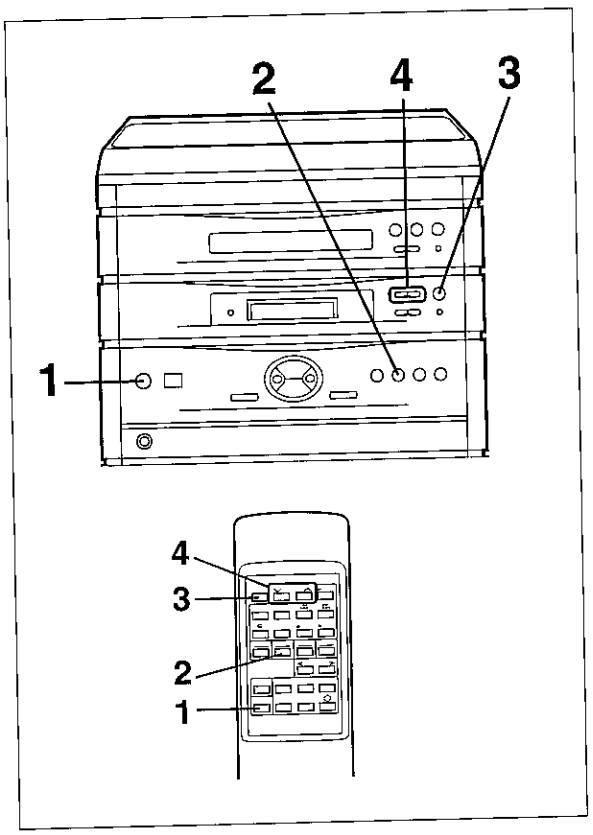
3 Within 30 seconds, press the PRESET (∨ or ∧) button to make the preset channel number flash in the display.

- Store the stations in memory, in order, starting with preset channel 1.

4 Within 30 seconds, press the MEMORY button to store that station in the selected station preset number memory.

- 20 FM stations can be preset (preset channels 1 through 20).
- 10 MW or 10 LW stations can be preset (preset channels 1 through 10).
  (There are no presets 11 through 20 for MW or LW stations.)
- If the "MEMORY" and preset number indicators go out before the station is memorised, repeat the operation from step 2.

5 Repeat steps 1 - 4 to set the other preset stations, or to change a preset station.



■ To recall a memorised station

Preset stations can also be selected from the remote control.

1 Set the POWER switch to ON.

2 Press the TUNER button.

3 Select the desired frequency band. (FM, MW or LW)

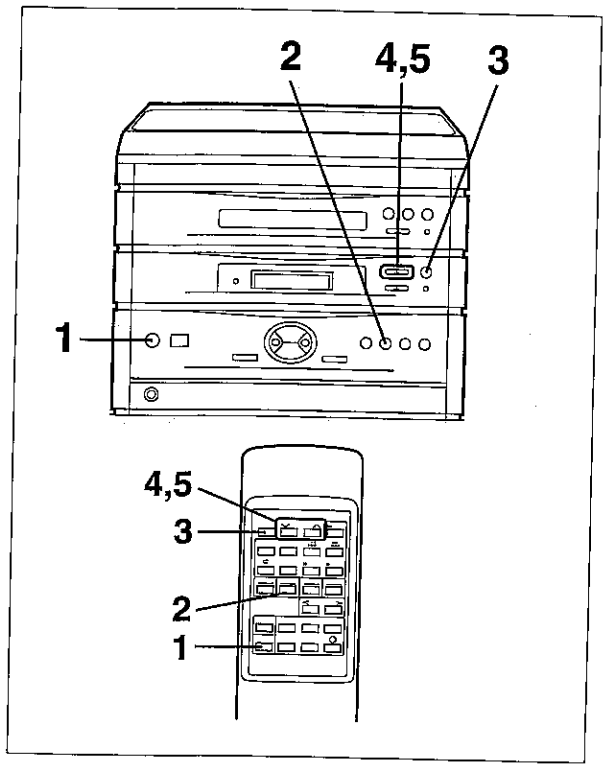
4 Press the PRESET (∨ or ∧) button to tune in to a station.

- The preset channel number and the frequency will appear in the display.

Note:
When searching for a memorised station, do not press the PRESET button for more than 0.5 seconds.
When the PRESET button is pressed for more than 0.5 seconds, the preset memory scan mode will be entered.

Backup function:

The backup function protects all station presets for a few hours even if there should be a power failure or the AC power lead is removed from the AC socket.



■ Preset memory scan

The stations saved in the preset memory can be scanned automatically.

1 Set the POWER switch to ON.

2 Press the TUNER button.

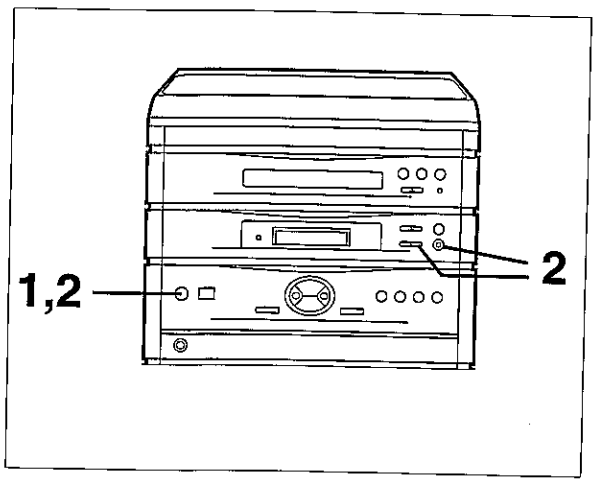
3 Select the desired frequency band. (FM, MW or LW)

4 To scan the preset stations, press the PRESET (∨ or ∧) button for more than 0.5 seconds.

- The station preset number flashes and programmed stations are received for 5 seconds each.

5 Press the PRESET (∨ or ∧) button again to stop the memory scan at the desired station.

Note:
When the preset memory does not have any stations stored in it, the preset memory scan will not function.



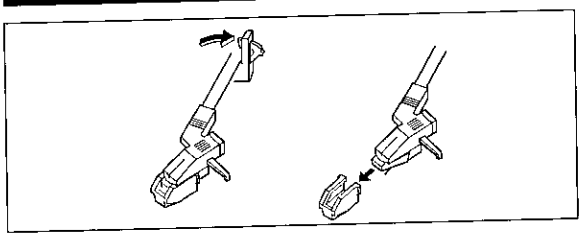
■ To clear all memorised stations

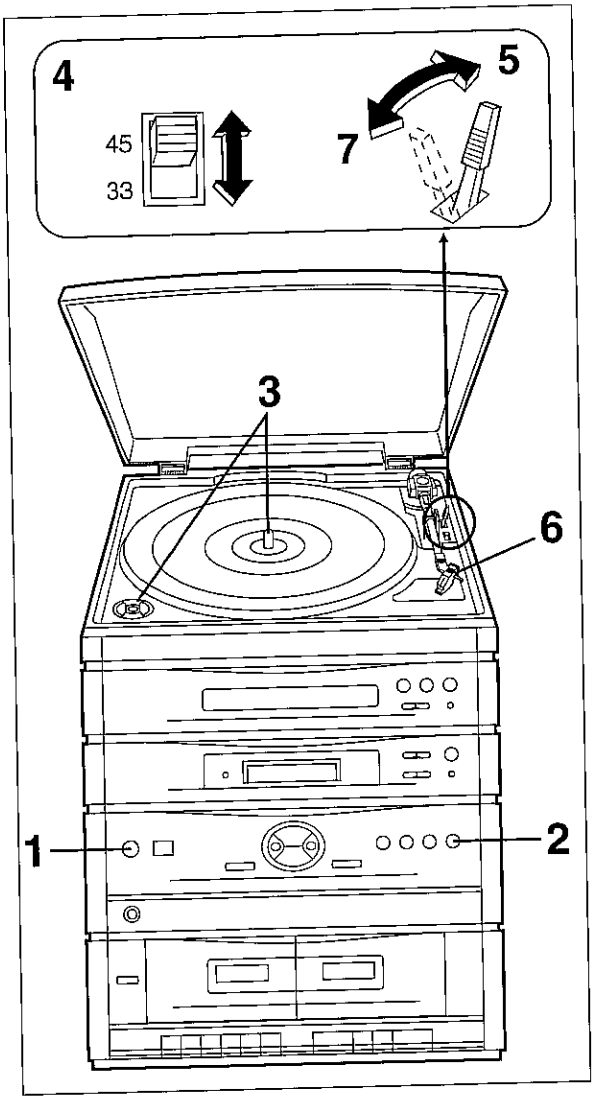
1 Set the POWER switch to STAND-BY.

2 Whilst holding down the MEMORY and TUNING ∧ buttons, set the POWER switch to ON.

- "CL" and "MEMORY" will appear on the display for a moment and all the memories will be cleared.

TURNTABLE OPERATION





■ Preparation

1 Release the tonearm clamp.

2 Remove the stylus protector.

■ Listening to records

1 Set the POWER switch to ON.

2 Press the PHONO button.

3 Place the record on the turntable. Place the EP record adaptor on the centre spindle to play a 17 cm (7") EP record.

4 Set the speed selector switch to 33 or 45 rpm according to the record.

5 Slide the cue lever up.

6 Move the headshell to the playing position.

7 Slide the cue lever down slowly. The cartridge will lower onto the record and start to play.

- The tonearm will automatically return to the rest position when the record finishes.
- To stop the record whilst it is playing, lift the cue lever up, and move the headshell by hand to rest position.

To temporarily stop playing:

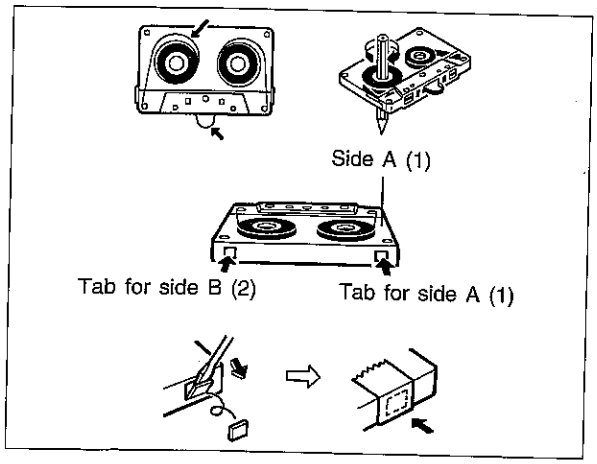
Slide the cue lever up to lift the tonearm.
Restart the record by sliding the cue lever down.

Note:

- The turntable's fixed tracking force is ideal for the cartridge supplied. However, mistracking may occur on records cut at very high levels. If mistracking occurs, check if the stylus is dirty or worn, if the turntable is perfectly level, or if vibration is reaching it. If mistracking still occurs, the problem is with the record, which should not be used.

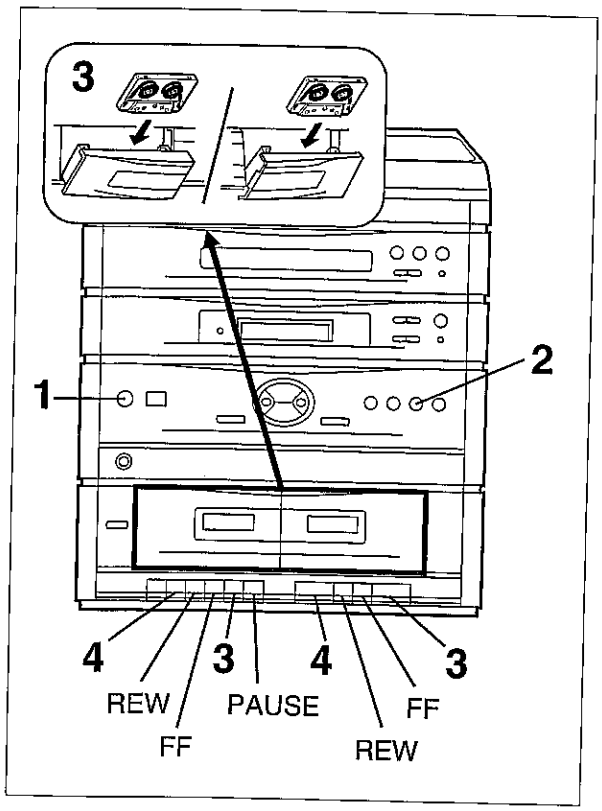
Precautions when playing records:

- The tonearm may not return automatically when a non-standard record is used. In this case, lift the cue lever up, and move the headshell by hand to the innermost groove to return it automatically.
- Do not rotate or stop the platter manually.
- Do not stop the tonearm when it is returning automatically.
- Moving or jarring the unit without securing the tonearm can damage the tonearm or stylus.
- Playing flexible records or badly warped records can damage the records and the stylus.
- When a record is played for the first time, the tonearm may not return automatically when the record finishes. In this case, lift the cue lever up, and move the headshell by hand to the innermost groove to return it automatically. After that, when the record is played, the tonearm will return automatically when the record finishes.
- Keep records away from excessive dust, since the static electricity built up on a record attracts dust easily.
- Do not place the speakers so they face the unit or are too close; this can cause feedback (howling) sounds when a record is playing.



■ General information

- For playback, use normal or low-noise tape for the best sound. (Metal or CrO_2 tape is not recommended.)
  For recording, use only normal tape.
- Do not use C-120 tapes, tapes with large diameter reels, or poor-quality tapes, since they can cause malfunctions.
- Before loading a tape into the cassette compartment, tighten the slack tape with a pen or pencil.
- Cassettes have removable tabs which prevent accidental recording or erasing from taking place. Removing the tab will protect the corresponding side from being erased. Cover the tab holes with adhesive tape to erase or record again.
- TAPE 1: Playback only.
  TAPE 2: Playback or recording.



■ TAPE 1 or TAPE 2 playback

1 Set the POWER switch to ON.

2 Press the TAPE button.

3 Press the STOP/EJECT button and load a cassette into the TAPE 1 or TAPE 2 cassette compartment.

4 Press the PLAY button of TAPE 1 or TAPE 2 to start playback.

5 To advance the tape, press the STOP/EJECT button, then press the FF button. To rewind, press the STOP/EJECT button, then press the REW button.

To interrupt playback: (TAPE 2 only)

Press the PAUSE button during playback.
Press the PAUSE button again to resume playback.

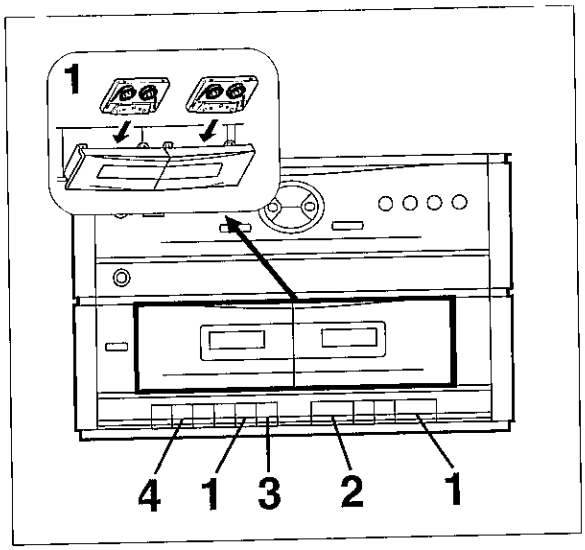
To stop playback:

Press the STOP/EJECT button.

Precautions:

- Be sure not to press the PLAY and REW buttons simultaneously, or the tape will be damaged.
- Before changing from one tape operation to another, press the STOP/EJECT button.
- If TAPE 1 and TAPE 2 are played back at the same time, only the sound from TAPE 1 will be heard.
- If the PAUSE button is pressed whilst the fast forward or rewind operation is in progress, the FF or REW button will not be released when the tape end is reached. In this case, press the STOP/EJECT button.

(Continued)



■ Continuous playback (TAPE 1 to TAPE 2)

1 Press the STOP/EJECT buttons and load cassettes into the TAPE 1 and TAPE 2 cassette compartments.

2 Press the PLAY button of TAPE 1.

3 Press the PAUSE button of TAPE 2.

4 Press the PLAY button of TAPE 2.

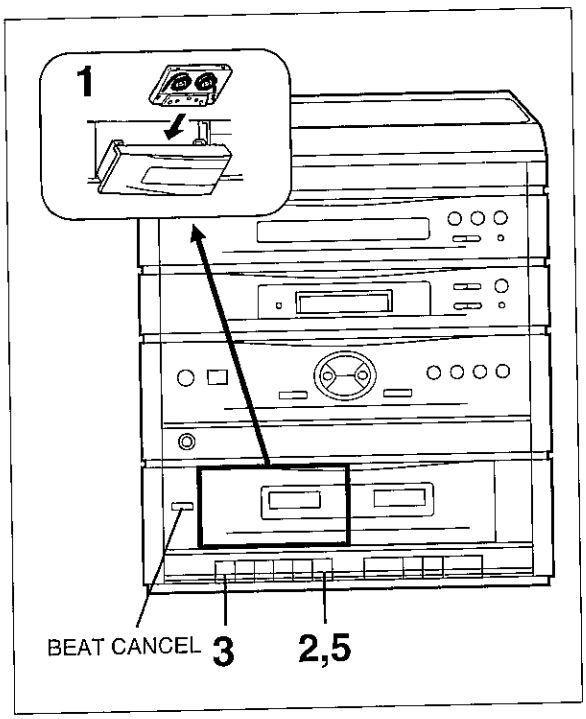
- When TAPE 1 stops at the end of the tape, the PLAY button of TAPE 1 and the PAUSE button of TAPE 2 are automatically released, and TAPE 2 starts to play.

Note:

- When in the continuous play mode, pressing the STOP/EJECT button of TAPE 1 starts TAPE 2 automatically.

RECORDING

- When recording important selections, be sure to make a preliminary test to ensure that the desired material is being properly recorded.
- The ALC (Automatic Record Level Control) circuit automatically controls the level of the input signal used for recording.
- The VOLUME, BALANCE, X-BASS and EQUALIZER MODE controls may be adjusted with no effect on the recorded signal. (Variable Sound Monitor)
- Metal and CrO_2 tapes should not be used for recording or dubbing.
- To erase a recorded tape, set the function selector switch to TAPE and press the RECORD button of TAPE 2.
  (Check to make sure that TAPE 1 is not being used.)



■ Recording from the radio, compact disc or a record

1 Load a cassette into the TAPE 2 cassette compartment.

2 Press the PAUSE button of TAPE 2.

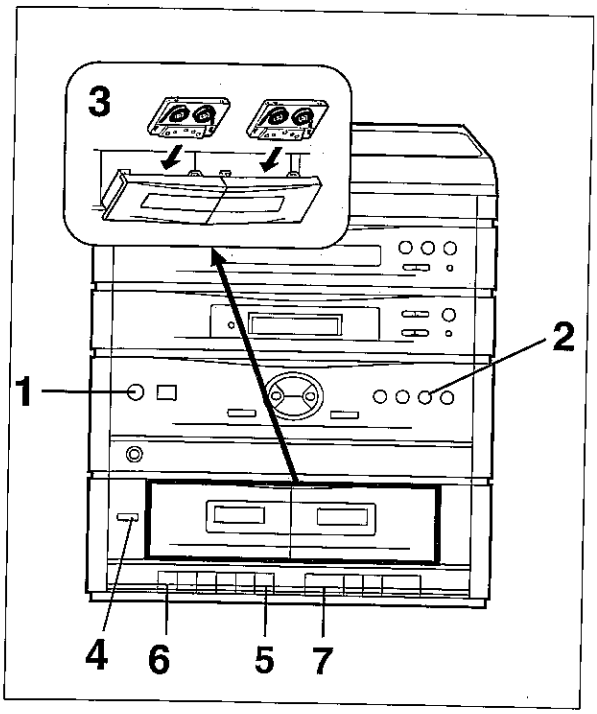
3 Press the RECORD button of TAPE 2, which also engages the PLAY button.

4 Tune in to the desired radio station (see pages 12-14), or play a compact disc (see pages 9-11) or a record (see page 15).

5 Press the PAUSE button of TAPE 2 again to begin recording.

Beat cancel switch

If a whistling noise occurs when recording MW or LW, set the BEAT CANCEL switch to A or B, whichever gives the best reception.



■ Dubbing from tape to tape

1 Set the POWER switch to ON.

2 Press the TAPE button.

3 Load a prerecorded cassette into the TAPE 1 cassette compartment. Insert a blank tape into the TAPE 2 cassette compartment.

- It is recommended that the recording tape be the same time length as the master tape.

4 Set the DUBBING SPEED switch to NORMAL for normal-speed dubbing, HIGH for high-speed dubbing.

- Do not change the setting of the DUBBING SPEED switch during dubbing.

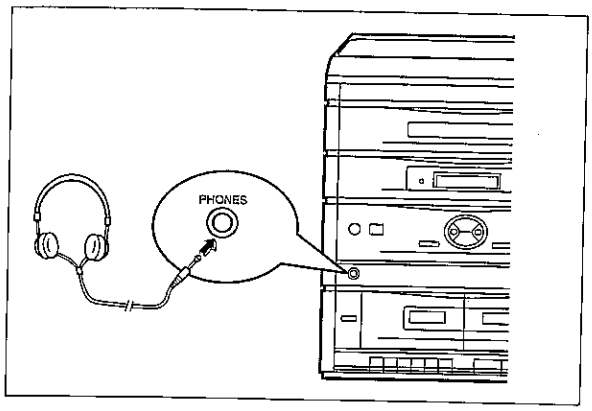
5 Press the PAUSE button of TAPE 2.

6 Press the RECORD button of TAPE 2, which also engages the PLAY button.

7 Press the PLAY button of TAPE 1.

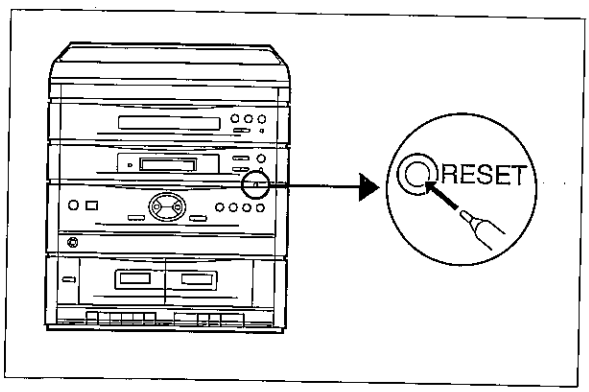
- The PAUSE button of TAPE 2 will be released automatically and dubbing from TAPE 1 to TAPE 2 will begin. (Synchronous dubbing start)

HEADPHONES



- Be sure that your headphones have a 6.3 mm (1/4") diameter plug and are between 8 ohms and 50 ohms impedance.
  Recommended impedance is 32 ohms.
- When headphones are connected, the speakers are disconnected automatically. Adjust the VOLUME control for desired volume.

RESETTING THE MICROCOMPUTER



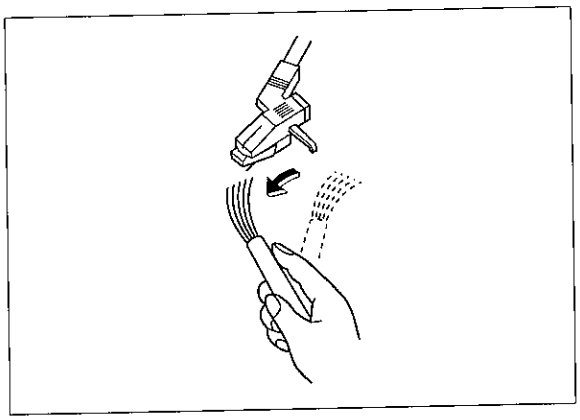
Reset the microcomputer by performing the following procedure for the cases shown below:

- To erase all of the stored memory contents, or
- If the display does not function properly, or
- The unit does not operate properly.

1 Set the POWER switch to STAND-BY.

2 Disconnect the AC power lead from the AC socket.

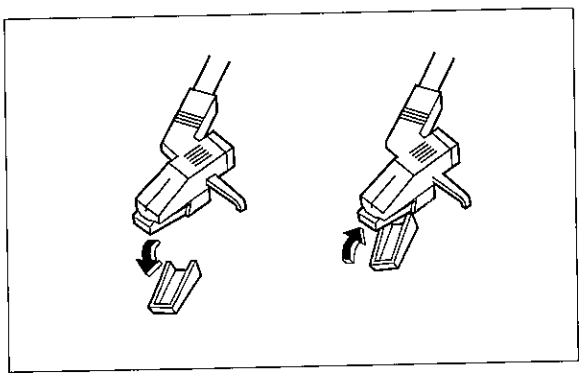
3 Press the RESET button for at least 3 seconds.



■ Cleaning the stylus

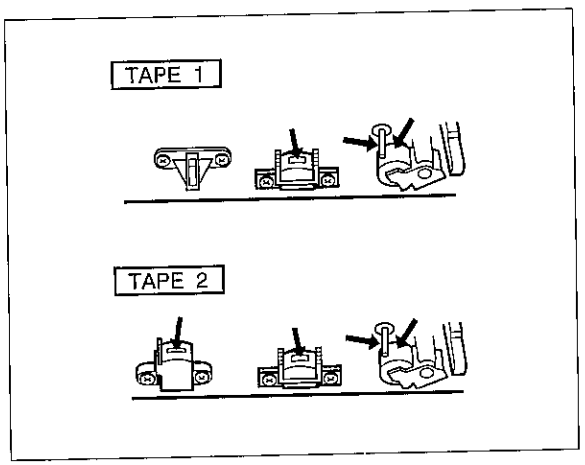
A dirty stylus will cause noise and poor sound quality. Use a stylus cleaning kit (consult your Sharp dealer) and brush off the dirt in the direction of the arrow.

- Do not brush in the opposite direction or from side to side, since this can damage the stylus.



■ Replacing the stylus

When the sound quality drops, replace the stylus with a new one (part No. STY-159, consult your Sharp dealer). Remove the old stylus by pulling it downwards gently, and push the new stylus into place as shown.



■ Internal care

- Dirty heads, capstans or pinch rollers can cause poor sound and tape jams. Clean these parts with a cotton swab moistened with commercial head/pinch roller cleaner or isopropyl alcohol.
- After long use, the deck's heads and capstans may become magnetised, causing poor sound. Demagnetise these parts once every 30 hours of playing/recording time by using a commercial tape head demagnetiser. Read the demagnetiser's instructions carefully before use.

■ External care

- Periodically wipe the cabinet with a soft cloth and dilute soap solution, then wipe with a dry cloth.
- Do not use chemically treated cleaning cloths or other chemicals.

SPECIFICATIONS

As a part of our policy of continuous improvement, SHARP reserves the right to make design and specification changes for product improvement without prior notice. The performance specification figures indicated are nominal values of production units. There may be some deviations from these values in individual units.

● General

Power source:	AC 230 V, 50 Hz
Power consumption:	80 W
Dimensions:	Width; 360 mm (14-3/16") Height; 416 mm (16-3/8") Depth; 350 mm (13-3/4")
Weight:	7.0 kg (16.0 lbs.)

● Amplifier section

Output power:	PMPO; 72 W (total) MPO; 36 W (18 W + 18 W) (DIN 45 324)(10 % T.H.D.) RMS; 20 W (10 W + 10 W) (DIN 45 324)(10 % T.H.D.)
Output terminals:	Speakers; 8 ohms Headphones; 8 - 50 ohms (recommended; 32 ohms)

● Compact disc player section

Type:	Compact disc player
Signal readout:	Non-contact, 3-beam semi-conductor laser pickup
Rotational speed:	200 - 500 rpm CLV, Approx.
Error correction:	CIRC (Cross Interleave Reed-Solomon Code)
Decoder:	16 bit linear
Filter:	4-times oversampling digital filter
Frequency response:	20 - 20,000 Hz
Signal/noise ratio:	90 dB (1 kHz)
Dynamic range:	90 dB (1 kHz)
Wow and flutter:	Unmeasurable (less than 0.001% W. peak)

● Tuner section

Frequency range:	FM; 87.5 - 108 MHz MW; 522 - 1,620 kHz LW; 153 - 281 kHz

● Cassette deck section

Frequency response:	50 - 14,000 Hz (Normal tape)
Motor:	DC motor x 1
Signal/noise ratio:	55 dB (TAPE 1, playback) 50 dB (TAPE 2, recording/playback)
Wow and flutter:	0.25 % (DIN 45 511) 0.15 % (WRMS)
Bias and erasure system:	AC
Tape speed:	4.76 cm/sec (1-7/8 ips.)
Heads:	TAPE-1: Playback x 1 TAPE-2: Record/playback x 1 Erase x 1

● Turntable section

Type:	Belt drive, semi-automatic
Speed:	33-1/3 and 45 rpm
Motor:	DC motor
Arm/cartridge:	Dynamic balanced straight tonearm with ceramic cartridge
Replacement stylus:	STY-159

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